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REMARKS/ARGUMENTS

Claims 1 and 3-28 are pending in this application. By this Amendment, Applicants AMEND claims 1, 7 and 8, and ADD new claims 21-28.

Applicants' counsel greatly appreciates the courtesies extended by the Examiner during the personal interview conducted on May 19, 2004, during which the prior art of record, the terms of degree "substantially" and "about" and related case law, and possible amendments to claim 1 were discussed.

Claims 1 and 3-10 were rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite.

With respect to the features of the "junction portion" and "lower terminal," claim 1 has been amended to correct the informalities noted by the Examiner.

Applicants respectfully submit that the added feature of "the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface" distinguishes the present claimed invention from the prior art. Thus, Applicants respectfully submit that the terms of degree "about" and "substantially" are not relied upon to distinguish the present invention over the prior art.

The Examiner is reminded that the courts have long held that the use of terms of degree do not render a claim indefinite. Rather, these terms merely indicate that exactitude is not being claimed and that slight variations are also contemplated. See York Prods., Inc. v. Central Tractor Farm & Family Ctr., 40 USPQ2d 1619 (Fed. Cir. 1996).

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1 and 3-10 under 35 U.S.C. § 112, second paragraph.

Claims 1, 3, 4, and 7-10 were rejected under 35 U.S.C. 103(b) as being anticipated by Katsuki et al. (U.S. 5,990,779). Claims 1, 3, 4, and 7-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Frielinghaus (U.S. 5,168,257) in view Turner (U.S. 3,214,719). Claim 5 was rejected under 35 U.S.C. §103(a) as being

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unpatentable over Katsuki et al. or Frielinghaus with Turner, and further in view of Nagao et al. (U.S. Patent No. 5,939,972). The Examiner indicated that Camp (U.S. Patent No. 5,726,623) was relied upon in this rejection. However, the Examiner has failed to make any reference to Camp in the body of this rejection. Thus, Applicants have assumed that the Examiner did not rely upon Camp to make the rejection. Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuki et al., or Frielinghaus with Turner, in view of, or further in view of Ikeda et al. (U.S. 6,147,330). Applicants respectfully traverse the rejections of claims 1 and 3-10.

Claim 1 has been amended to recite:

“A surface-mountable PTC thermistor element comprising:
a thermistor element body including a top surface and a bottom surface;

electrodes disposed on the top surface and the bottom surface of the thermistor element body;

lower and upper terminals arranged such that each of the electrodes is connected with a respective one of the lower and upper terminals, and each of the lower and upper terminals is extended downward; wherein

said lower terminal includes a junction portion, a short vertical-leg portion bent vertically in a downward direction at an angle of about 90° relative to the surface of said thermistor element body such that the short vertical-leg portion extends substantially perpendicular to the surface of the thermistor element body, and a lower-end portion which extends substantially parallel to the junction portion and substantially perpendicular to the short vertical-leg portion;

said short vertical-leg portion is directly connected and extends directly between the junction portion and the lower-end portion;

the junction portion of the lower terminal is mechanically attached to one of the electrodes;

the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface; and

said vertical-leg portion of the lower terminal is located in the vicinity of the center of the thermistor element body so as to be spaced inwardly from a periphery of the thermistor element body.” (emphasis added)

Applicants' claim 1 recites the features of "the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and the mounting surface when the PTC thermistor element is mounted on a mounting surface." Applicants' claim 21 includes a similar recitation of structure.

With the improved features of claims 1 and 21, Applicants have been able to provide a PTC thermistor which is easily mounted on a substrate (see, for example, the first full paragraph on page 3 of the originally filed Specification).

As noted above, Applicants have amended claim 1 to recite the features of "the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface." New claim 21 contains a similar recitation of structure.

In contrast, Katsuki et al. clearly teaches in **Figs. 1, 3, and 7** that the terminals **4, 5, 111, 114, 121, and 124** contact cases **3, 112, and 122**, **NOT** that the upper and lower terminals contact only the electrodes on the thermistor element body and the mounting surface as recited in Applicants' claim 1. Thus, Applicants respectfully submit that Katsuki et al. fails to teach or suggest the feature of "the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface" as recited in Applicants' claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. 103(b) as being anticipated by Katsuki et al.

Frielinghaus teaches in **Fig. 3** that the upper **14** and lower **16** terminals contact caps **26** and **28**, **NOT** that the upper and lower terminals contact only the electrodes on the thermistor element body and the mounting surface as recited in Applicants' claim 1. Thus, Applicants respectfully submit that Frielinghaus fails to teach or suggest the feature of "the upper and lower terminals contact only the electrodes on the upper and

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lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface” as recited in Applicants’ claim 1.

The Examiner has relied upon Turner to allegedly cure various deficiencies in Frielinghaus. However, Turner fails to teach or suggest the feature of “the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface” as recited in Applicants’ claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Frielinghaus (U.S. 5,168,257) in view Turner.

The Examiner has relied upon Nagao et al. and Ikeda et al. to allegedly cure various deficiencies in Katsuki and the combination of Frielinghaus and Turner. However, neither Nagao et al. nor Ikeda et al. teaches the features of “the upper terminal includes a downward extending vertical portion located away from the thermistor element body” and “the upper and lower terminals contact only the electrodes on the upper and lower surfaces of the thermistor element body and a mounting surface when the PTC thermistor element is mounted on the mounting surface” as recited in Applicants’ claim 1.

Accordingly, Applicants respectfully submit that none of the prior art of record, applied alone or in combination, teaches or suggests the unique combination and arrangement of elements recited in claim 1 of the present application. Claims 3-10 depend upon claim 1 and are therefore allowable for at least the reasons that claim 1 is allowable.

In addition, for the reasons discussed above, Applicants respectfully submit that new claim 21 is allowable. Claims 22-28 depend upon claim 21 and are therefore allowable for at least the reasons the claim 21 is allowable.

To the extent necessary, Applicants petition the Commissioner for a ONE-month

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extension of time, extending to July 5, 2004, the period for response to the Office Action dated March 5, 2004.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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